



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/074,363	02/12/2002	Scott D. Gartland	IR-2991(EV)	5739

7590

09/16/2003

Michael M. Gnibus
111 Lord Drive
PO Box 8012
Cary, NC 27512-8012

EXAMINER

SOOHOO, TONY GLEN

ART UNIT

PAPER NUMBER

1723

DATE MAILED: 09/16/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/074,363

Applicant(s)

GARTLAND ET AL.

Examiner

Tony G Soohoo

Art Unit

1723

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 April 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-33 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-33 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4.5.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-14, 17-18, 20-22, 28-30 and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over LeMaster 4813786.

LeMaster teaches that fluid containers 11A, 11, 11B, 11C may be provided with a source of desired fluid for transport and delivery inside the container and also having a sealed top 12, 12A, 12B, 12C, whereby a integral mixing unit assembly with impeller 37A, 24 provided with quick coupling means 53, 49, 2475, 46 which provides for the provision of an electric motor 66 to move the impeller to agitate the fluid contents without having to open the container to homogenize the fluid after transport to the desired location and before the desired use, see column 2, lines 5-18, 40-68.

The LeMaster reference discloses all of the recited subject matter as defined within the scope of the claims with the exception of the contents of the source fluid in the device being a field responsive material in the chamber (magnetorheological fluid) (claims 1, 2, 22). Since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. (In re Leshin, 125 USPQ 416.), and that LeMaster teaches that the device is not limited to a particular use of a specific material within the

Art Unit: 1723

container which is meant for shipment within the container, it is deemed that it would have been obvious to one of ordinary skill in the art to modify the device of LeMaster to include the fluid type within the container as being a "field responsive material" or magnetorheological (MR) or (ER) fluid. So that the MR or ER fluid may be shipped easily and prepared for use in a more easy and convenient manner.

With regards to claims 3-4 and 27, LeMaster discloses all of the recited subject matter as defined within the scope of the claims with the exception of the container being a drum having a capacity of 55 gallons. It is old and well known to use 55 gallon drums for holding fluids for transport and storage. Accordingly, it is deemed that it would have been obvious to one of ordinary skill in the art to substitute/modify the container of LeMaster with a 55 gallon drum as the container shape in connection with the provided mixer impeller unit so as to provide a more easily constructed and cost effective container for shipment and mixing.

With regards to claim 15, it is old and well known to use electric motors to drive impellers in a container in an efficient manner, thus it is deemed that it would have been obvious to one of ordinary skill in the art to substitute for the motor of LeMaster with an electric motor so that the impeller is driven in a more energy efficient manner.

With regards to claims 5-9, 20, 22 and 33 to the location of the inlet or outlet port located on a 1st end, of the container of wall of the container. It is old and well known in the art to provide shrouded outlets or inlets upon a container located on either ends of the container or the sidewall in order to provide a convenient manner to fill or dispense from the container. Accordingly, absent any unexpected result of an inlet or outlet port

Art Unit: 1723

to provide for the filling or discharge from the container, it is deemed that it would have been obvious to one of ordinary skill in the art to provide with the container of LeMaster with an inlet port and/or outlet port located on the 1st end or 2nd end of the container, or the side wall of the container so as to provide a convenient location to fill or discharge the fluid from the container by the user.

With regards to claims 10-14, the LeMaster reference discloses all of the recited subject matter as defined within the scope of the claims including an impeller being a propeller, or hydrofoil mixer, however fails to show the impeller being either a squirrel cage (claim 10, axial weld mixer, or vortex mixer). LeMaster teaches that the impeller may be of various types, column 4, lines 57-60. It is old and well known in the art that fluid impellers have known structural functional equivalent of types which include squirrel cage, propeller, axial weld type, hydrofoil, or vortex shaped mixer impellers.

MPEP states:

MPEP 2144.06 Art Recognized Equivalence for the Same Purpose
COMBINING EQUIVALENTS KNOWN FOR THE SAME PURPOSE
"It is prima facie obvious to combine two compositions each of which is taught by the prior art to be useful for the same purpose, in order to form a third composition to be used for the very same purpose.... [T]he idea of combining them flows logically from their having been individually taught in the prior art." In re Kerkhoven, 626 F.2d 846, 850, 205 USPQ 1069, 1072 (CCPA 1980) (citations omitted) (Claims to a process of preparing a spray-dried detergent by mixing together two conventional spray-dried detergents were held to be prima facie obvious.). See also In re Crockett, 279 F.2d 274, 126 USPQ 186 (CCPA 1960) (Claims directed to a method and material for treating cast iron using a mixture comprising calcium carbide and magnesium oxide were held unpatentable over prior art disclosures that the aforementioned components individually promote the formation of a nodular structure in cast iron.); and Ex parte Quadranti, 25 USPQ2d 1071 (Bd. Pat. App. & Inter. 1992) (mixture of two known herbicides held prima facie obvious). But see In re Geiger, 815 F.2d 686, 2 USPQ2d 1276 (Fed. Cir. 1987) ("Based upon the prior art and the fact that each of the three components of the composition used in the claimed method is conventionally employed in the art for treating cooling water systems, the board held that it would have been prima facie obvious, within the meaning of 35 U.S.C. 103, to employ these components in combination for their known functions and to optimize the amount of each additive.... Appellant argues... hindsight reconstruction or at best,... obvious to try'.... We agree with appellant.").

SUBSTITUTING EQUIVALENTS KNOWN FOR THE SAME PURPOSE

In order to rely on equivalence as a rationale supporting an obviousness rejection, the equivalency must be recognized in the prior art, and cannot be based on applicant's disclosure or the mere fact that the components at issue are functional or mechanical equivalents. In re Ruff, 256 F.2d 590, 118 USPQ 340 (CCPA 1958) (The mere fact

Art Unit: 1723

that components are claimed as members of a Markush group cannot be relied upon to establish the equivalency of these components. However, an applicant's expressed recognition of an art-recognized or obvious equivalent may be used to refute an argument that such equivalency does not exist.); In re Scott, 323 F.2d 1016, 139 USPQ 297 (CCPA 1963) (Claims were drawn to a hollow fiberglass shaft for archery and a process for the production thereof where the shaft differed from the prior art in the use of a paper tube as the core of the shaft as compared with the light wood or hardened foamed resin core of the prior art. The Board found the claimed invention would have been obvious, reasoning that the prior art foam core is the functional and mechanical equivalent of the claimed paper core. The court reversed, holding that components which are functionally or mechanically equivalent are not necessarily obvious in view of one another, and in this case, the use of a light wood or hardened foam resin core does not fairly suggest the use of a paper core.); Smith v. Hayashi, 209 USPQ 754 (Bd. of Pat. Inter. 1980) (The mere fact that phthalocyanine and selenium function as equivalent photoconductors in the claimed environment was not sufficient to establish that one would have been obvious over the other. However, there was evidence that both phthalocyanine and selenium were known photoconductors in the art of electrophotography. "This, in our view, presents strong evidence of obviousness in substituting one for the other in an electrophotographic environment as a photoconductor." 209 USPQ at 759.). An express suggestion to substitute one equivalent component or process for another is not necessary to render such substitution obvious. In re Fout, 675 F.2d 297, 213 USPQ 532 (CCPA 1982).

Accordingly, whereas it is old and well known that, it is old and well known in the art that fluid impellers have known structural functional equivalent of types which include squirrel cage, propeller, axial weld type, hydrofoil, or vortex shaped mixer impellers, it is deemed that it would have been obvious to one of ordinary skill in the art to substitute the propeller hydrofoil impeller of LeMaster with any known impeller structure performing an fluid agitation function such as squirrel cage, propeller, axial weld type, hydrofoil, or vortex shaped mixer impellers, so as to produce a more convenient or effective promotion of fluid flow within the container.

3. Claims 15-16 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over LeMaster 4813786 in view of the teaching of Schnetz 2301461.

LeMaster discloses all of the recited subject matter as defined within the scope of the claims with the exception of a lid secured to the container.

Art Unit: 1723

Schnetz teaches that a container having a top 17 which is closed by a securing clamp 24, 26 whereby the lid also holds a agitator 19, 21 for mixing.

In view of the teaching of Schnetz that a mixer container having an end with a mixer may be provided upon a closable lid that is held by a clamp for access to the interior of the container, it is deemed that it would have been obvious to one of ordinary skill in the art to modify the upper end of the container of LeMaster with a lid portion that is closable with a clamp attachment means or with two clamps, in order to provide a convenient manner to access the interior of the mixing container. With regards to the use of two clamps of Iciam 19, It is noted that it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art. *St. Regis Paper Co. v. Bemis Co.*, 193 USPQ 8.

4. Claims 23-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over LeMaster 4813786 in view of Takata et al 5399014.

LeMaster discloses all of the recited subject matter as defined within the scope of the claims with the exception of baffles on the sides of the container.

The reference to Takata et al, figure 5a, teaches that a container for mixing may have rectangular baffles along axially and substantially perpendicular to and integral to the sidewall of the container in order to further direct the flow of fluid in a more desirable direction within the container.

In view of the teaching by the Takata reference it is deemed that it would have been obvious to one of ordinary skill in the art to provide for the container of LeMaster with an

integral perpendicularly oriented baffles such that the flow within the container is directed in a more desirable manner.

5. Claims 31-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over LeMaster 4813786 in view of Orr et al 5944418.

LeMaster discloses all of the recited subject matter as defined within the scope of the claims with the exception of the container being integral with a base of a pallette.

Orr teaches that a mixer container 14 may be secured to uprights 46 and a skid 48, column 3, lines 66-67 through column 4, line 6. Whereby the container may be positioned via the skid.

In view of the teaching of Orr, it is deemed that it would have been obvious to one of ordinary skill in the art to provide the container of LeMaster with uprights 46 and a skid 48 so that the mixer container may be positioned using a forklift via the skid.

Conclusion

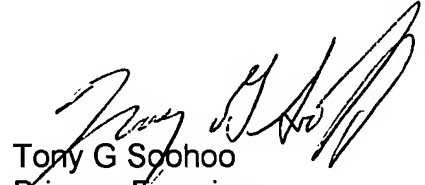
6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Stolzenfeld 5102151 teaches the use of containers as a means to mix and store/transport a fluid. Burns 4833897 teaches the use of baffles in a mixer container. Puchalski 3132850, Weber 5489151, and Lu 5941636 teaches the use of drum shaped containers as mixing containers. Duncan 311954, Epple 4032045, Stallings 5816136 teach the use of lids upon a mixer. Agranat 3539155, Kortschot et al 5555796, Craddock 2008684, and Trier 2557622 teaches containers with bases.

Art Unit: 1723

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tony G Soohoo whose telephone number is (703) 308-2882. The examiner can normally be reached on 7:00 AM - 5:00 PM, Tues. - Fri..

The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.



Tony G Soohoo
Primary Examiner
Art Unit 1723
